



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,271	08/22/2006	Shunpei Yamazaki	0756-7804	6014
31780	7590	11/03/2008	EXAMINER	
ERIC ROBINSON			JAHAN, BILKIS	
PMB 955				
21010 SOUTHBANK ST.			ART UNIT	
POTOMAC FALLS, VA 20165			PAPER NUMBER	
			2814	
			MAIL DATE	
			DELIVERY MODE	
			11/03/2008	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,271	Applicant(s) YAMAZAKI, SHUNPEI	
	Examiner BILKIS JAHAN	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/10/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Initially, and with respect to claims [1], [5], [6], [7], [13], [14], [15], note that a “Product by Process” claim is direct to the product *per se*, no matter how actually made. See *In re Thorpe et al.*, 227 USPQ 964 (CAFC, 1985) and the related case law cited therein which makes it clear that it is the final product *per se* which must be determined in a “Product by Process” claim, and do not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in “Product by Process” claims or not. As stated in Thorpe,

Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. *In re Brown*, 459 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969); *Buono v. Yankee Maid Dress Corp.*, 77 F.2d 274, 279, 26 USPQ 57, 61 (2d. Cir. 1935).

Note that applicant has burden of proof in such cases as the above case law makes clear.

Also, initially, and with respect to claims [1-3], [5-7], [8], [10], [13-15], [4], [12] note that a “functional limitations” intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, and then its meet the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967); *In re Otto*, 136 USPQ 458, 459 (CCPA 1963); *Ex parte Masham*, 2USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). In the instant case and as

Art Unit: 2814

explained below, Kimura and Kimura in view of Nakamura, Nishi shows all structural limitations specifically recited in the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-8, 10-11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (US 2003/0052324) A1.

Regarding claim 1, Kimura discloses a semiconductor device (Fig. 13G) comprising:

- an antenna 2708 (Fig. 13G, Para. 190), an integrated circuit (Fig. 10B) comprising a thin film transistor 5026 (Fig. 6A, Para. 133), a light-emitting element 6050 (Fig. 10B, Para. 169), and
- a light-receiving element 6045 (Fig. 10A, Para. 167), wherein the light-emitting element 6050 (Fig. 10B, Para. 169) and the light-receiving element 6045 (Fig. 10A, Para. 167) each have a layer for conducting photoelectric conversion (Fig. 10A and Fig. 10B, Para. 167, Para. 169), and

- wherein the antenna 2708 (Fig. 13G, Para. 190), the light-emitting element 6050 (Fig. 10B, Para. 169) and the light-receiving element 6045 (Fig. 10A, Para. 167) are electrically connected to the integrated circuit.
- the light emitting element 6050 and the light receiving element 6045 each have a layer 5007, 5008, 5045 (Fig. 5A, Fig. 6C, Para. 125, Para. 146) for conducting photoelectric conversion using a non-single crystal thin film (Para. 125, Para. 146).
- Also regarding claim 1, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claim 2, Kimura further discloses the integrated circuit (Fig. 10B), the light-emitting element 6050 (Fig. 10B, Para. 169) and the light-receiving element 6045 (Fig. 10A, Para. 167) are formed integrally (Fig. 10B).

- Also regarding claim 2, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element

Art Unit: 2814

configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claim 3, Kimura further discloses the antenna 2708, the integrated circuit, the light-emitting element and the light-receiving element are formed integrally (Fig. 13G).

- Also regarding claim 3, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claims 5, 6, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that forming the light-emitting element and the light-receiving element over a first substrate and then separated the elements from the substrate, and attaching the elements to a second substrate, are intermediate method steps that do not affect the structure of the final device.

Art Unit: 2814

- Also regarding claims 5, 6, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claim 7, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that forming the antenna, the integrated circuit, the light-emitting element and the light-receiving element are formed over a first substrate and then separating the first substrate and attaching the antenna, the IC, the elements to a second substrate, are intermediate method steps that do not affect the structure of the final device.

- Also regarding claim 7, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claim 8, Kimura discloses limitations above but does not disclose a step of demodulating the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a third signal, wherein the light-emitting element converts the third signal to the second optical signal.

- Also regarding claim 8, it is noted that Kimura shows all aspects of the semiconductor device according to the instant invention (see above) and that demodulating the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a third signal, wherein the light-emitting element converts the third signal to the second optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claim 10, Kimura discloses an IC card comprising:

- an antenna 2708 (Fig. 13G, Para. 190), an integrated circuit (Fig. 10B) comprising a thin film transistor 5026 (Fig. 6A, Para. 133), a light-emitting element 6050 (Fig. 10B, Para. 169), and a light-receiving element 6045 (Fig. 10A, Para. 167),
- wherein the antenna 2708 (Fig. 13G, Para. 190), the light-emitting element 6050 (Fig. 10B, Para. 169) and the light-receiving element 6045 (Fig. 10A, Para. 167) are electrically connected to the integrated circuit (Antenna has

to be electrically connected to the Integrated Circuit in order to be the device working).

- wherein the integrated circuit (Fig. 10B), the light-emitting element 6050 (Fig. 10B, Para. 169) and the light-receiving element 6045 (Fig. 10A, Para. 167) are formed integrally (Fig. 10B).
- Also regarding claim 10, it is noted that Kimura shows all aspects of the IC card according to the instant invention (see above) and that an antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claim 11, Kimura discloses limitations above and Kimura further discloses the antenna, the integrated circuit, the light-emitting element and the light-receiving element are formed integrally (Fig. 13G, the antenna 2708 in Fig. 13G is integrally connected to the IC in the device).

Regarding claims 13-15, it is noted that Kimura shows all aspects of the IC card according to the instant invention (see above) and that forming the integrated circuit, the light-emitting element and the light-receiving element over a first substrate and then

Art Unit: 2814

separated the first substrate and attaching a second substrate, are intermediate method steps that do not affect the structure of the final device.

- Also regarding claims 13-15, it is noted that Kimura shows all aspects of the IC card according to the instant invention (see above) and that an antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal, are functions of the device that do not affect the structure of the final device.

Claims 4, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (US 2003/0052324) A1 in view of Nishi et al (US 6,590,633 B1).

Regarding claim 4, Kimura further discloses the integrated circuit comprising a connection terminal and, a rectification circuit (Fig. 14B, element "AMPLIFICATION ELEMENT") that generates power supply voltage from an alternating current signal that is input to the connection terminal by an antenna. However, Kimura does not disclose a demodulation circuit for demodulating the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a third signal, wherein the light-emitting element converts the third signal to the second optical signal.

- However, Nishi et al disclose a demodulation circuit (col. 12, line 27) and a logic circuit (col. 12, line 20). Nishi teaches a demodulation circuit and logic circuit are used to management and control of the charging state and the management and control of the communication port (col. 12, lines 22-24). It would have been obvious to one of the ordinary skill of the art at the time of invention to add Kimura's structure with Nishi's structure including demodulation circuit and logic circuit to manage and control charging state and the communication port (col. 12, lines 22-24).
- Also regarding claim 4, it is noted that Kimura in view of Nishi shows all aspects of the semiconductor device according to the instant invention (see above) and that demodulating the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a third signal, wherein the light-emitting element converts the third signal to the second optical signal, are functions of the device that do not affect the structure of the final device.

Regarding claim 12, Kimura discloses limitations above and Kimura further discloses the integrated circuit comprises a connection terminal, a rectification circuit (Fig. 14B, element "AMPLIFICATION ELEMENT") that generates power supply voltage from an alternating current signal that is input to the connection terminal by an antenna. However, Kimura does not disclose a demodulation circuit for demodulating the first

Art Unit: 2814

optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a third signal, wherein the light-emitting element converts the third signal to the second optical signal.

- However, Nishi et al disclose a demodulation circuit (col. 12, line 27) and a logic circuit (col. 12, line 20). Nishi teaches a demodulation circuit and logic circuit are used to management and control of the charging state and the management and control of the communication port (col. 12, lines 22-24). It would have been obvious to one of the ordinary skill of the art at the time of invention to add Kimura's structure with Nishi's structure including demodulation circuit and logic circuit to manage and control the charging state and the communication port (col. 12, lines 22-24).
- Also regarding claim 12, it is noted that Kimura in view of Nishi shows all aspects of the IC card according to the instant invention (see above) and that demodulating the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a third signal, wherein the light-emitting element converts the third signal to the second optical signal, are functions of the device that do not affect the structure of the final device.

Claims 9, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (US 2003/0052324) A1 in view of Nakamura (US 2004/0152392 A1).

Regarding claims 9, 16, Kimura discloses limitations above and Kimura further discloses the first substrate is a glass substrate 5001 (Fig. 5A, Para. 118) but does not disclose the second substrate is a plastic substrate.

- However, Nakamura discloses the second substrate is a plastic substrate 315 (Fig. 3A, Para. 127). Nakamura teaches plastic substrate is used to emit light from the light emitting elements (Para. 28, lines 1-2). It would have been obvious to one of the ordinary skill of the art at the time of invention to add Kimura's structure with Nakamura's structure including plastic substrate to emit light from the light emitting elements (Para. 28, lines 1-2).

Response to Arguments

Applicant's arguments filed on 8/11/08 have been fully considered but they are not persuasive because:

- Applicant's argued in page 11 that "According to the present invention, transmission/reception of a signal is performed by optical communication and voltage of a power supply is supplied by radio waves. Therefore, it is possible that higher voltage of the power supply can be supplied to an integrated circuit as compared with the case of performing

Art Unit: 2814

transmission/reception of a signal and supplying the voltage of a power supply when only an optical signal is used. Therefore, communication range can be lengthened, and constraint in design of an integrated circuit by a power supply voltage can be reduced. Moreover, a communication area can be more easily limited as compared with the case of performing transmission/reception of a signal and supplying the voltage of a power supply when only radio waves are used.” In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., radio waves) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

- Applicant's argued in page 11 that “Kimura appears to teach that the device including the antenna 2708 is a cellular phone. However, the Applicant respectfully submits that the antenna 2708 of Kimura is not configured to receive a first signal, wherein a power supply voltage is generated based on the first signal.” However, the claims do not recite that it is not a cellular phone antenna or an antenna for which device such as radio.
- Applicant's argued in page 11 that “the Applicant respectfully submits that Kimura does not teach or suggest a light-receiving element configured to

receive a second optical signal; and a light-emitting element configured to transmit a third optical signal. Since Kimura does not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and”. However, Kimura discloses all structural limitations as discussed above and also when the semiconductor compound recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

- Applicant's argued in page 12 that dependent claims 9 and 16 as obvious based on the Combination of Kimura and U.S. Publication No. 2004/0152392 to Nakamura. Since claim 9 is multiply dependent on claims 5-8, since claim 16 is multiply dependent on claims 13-15, since the rejection based on Kimura appears to relate solely to claims 1-3, 5-7, 10 and 13, and since claim 15 depends from claim 12, it appears that the Official Action only rejects claims 9/5-7 and 16/13-14 as obvious based on the combination of Kimura and Nakamura. Please incorporate the arguments above with respect to the deficiencies in Kimura. However, claim 9 is dependent any one of claims 5-8 and claim 16 is dependent any

Art Unit: 2814

one of claims 13-15. Applicant mentioned above that “Official Action only rejects claims 9/5-7 and 16/13-14 as obvious based on the combination of Kimura and Nakamura.” Therefore, the office action does need to reject **any one** of claim 9/5-8 and **any one** of claim 16/13-15 as shown above.

- Applicant’s also argued in page 12 that “Kimura and Nakamura, either alone or in combination, do not teach or suggest that Kimura should be modified to include an antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; an integrated circuit comprising a thin film transistor; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal. Since Kimura and Nakamura do not teach or suggest all the claim limitations, a prima facie case of obviousness cannot be maintained. However, Kimura in view of Nakamura disclose all structural limitation above. Therefore, Kimura in view of Nakamura’s device function as Applicant’s device as discussed in above rejection. Also, In response to applicant's argument that “antenna configured to receive a first signal, wherein a power supply voltage is generated based on the first signal; a light-receiving element configured to receive a second optical signal; and a light-emitting element configured to transmit a third optical signal” a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the

Art Unit: 2814

claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

- Applicant's also argued in pages 12-13 regarding claims 4 and 12 Kimura and Nishi, either alone or in combination, do not teach or suggest the amended features of the present invention and the function of the amplification element is different from that of the rectification circuit of the present invention. However, In reference to the claim language referring to the functions of the semiconductor Device, i.e. for demodulating the first optical signal received in the light-receiving element, and a logic circuit that conducts arithmetic operation according to the first optical signal that is demodulated to generate a third signal, wherein the light-emitting element converts the third signal to the second optical signal intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, and then its meet the claim. In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963); Ex parte Masham, 2USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). In the instant case and as explained above, Kimura in view of Nishi shows all structural limitations specifically recited in the claim. Therefore, Nishi does cure the above-referenced deficiencies in Kimura and a prima facie case of obviousness cannot be maintained.

Art Unit: 2814

- Applicant's also argued in pages 15-16, regarding claims 4 and 12
"Kimura and Nishi both arts are not analogous, because Specifically, Nishi is directed to a stage apparatus 1 (column 12, line 29; Figure 1, reproduced below); whereas, Kimura is directed to a semiconductor device." In response to applicant's argument that Kimura and Nishi are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Also, Nishi shows that his invention is related to the semiconductor device (col. 9, lines 51-52, col. 9, lines 57-60). Therefore, the technical fields of Nishi's device and Kimura's semiconductor device are not different from each other and one of ordinary skill in the art at the time of the present invention would have added features from Kimura's stage semiconductor apparatus to Nishi's semiconductor device.
- Applicant's also argued in page 17 regarding claims 12 and 13 and dependent claims 9/5-7 and 16/13-14, the Official Action does not appear to address independent claim 8, dependent claim 9 as it depends from claim 8, or dependent claim 16 as it depends from claim 15, which depends from claim 12. It appears that claims 8, 9/8 and 16/15/12 were merely overlooked by the Examiner." However, claim 9 is dependent any

one of claims 5-8 and claim 16 is dependent any one of claims 13-15.

Applicant mentioned above that “Official Action only rejects claims 9/5-7 and 16/13-14 as obvious based on the combination of Kimura and Nakamura.” Therefore, the office action does need to reject **any one** of claim 9/5-8 and **any one** of claim 16/13-15 as shown above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BILKIS JAHAN whose telephone number is (571)270-5022. The examiner can normally be reached on M-F, 8am-5pm.

Art Unit: 2814

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571)-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marcos D. Pizarro/
Primary Examiner, Art Unit 2814

BJ